

Remarks

In the Office Action of March 31, 2006, the Examiner objected to Claims 2-8 with a recitation that the lip was of harder material than the sleeve in Claims 2 and 3. By this Amendment that mistake has been corrected.

The Examiner also noted a typo in claim 6 and Claim 5 was rejected under 35 USC 112 because of a lack of units in the density recitation. The Examiner should note however that Claims 5 and 6 were cancelled by Applicant's amendment of January 6, 2006. Accordingly it is requested that those objections and rejection be reconsidered and withdrawn.

The Examiner refused registration based upon the patent to Miser under 35 USC 102. Examiner indicated that Miser discloses a hollow sleeve 14, a bell shaped lip portion S2 and L and a tubular portion S1 and H together with a metal sleeve 30. "If the prior art structure is capable of performing the intended use, then it meets the Claim" was the stated reason for the rejection.

It is Applicant's position that the cited prior art is not capable of performing the intended use.

In the instant patent application at for the example the last sentence on page 9, it is stated that "under pressure the lip expands against a side of the pipe and as pressure increases the body of the bell also expands against the pipe". Accordingly, both the lip and the body of the bell are flexible so that under pressure they expand against the side of the pipe to seal it. While the material of construction is polyurethane the bell is formed by molding polyurethane with the harder bell portion intermixing with the softer lip

portion at its interface. When cured then a unitary structure is formed which is used to seal the interior of a pipe by expanding under pressure against the side walls of the pipe.

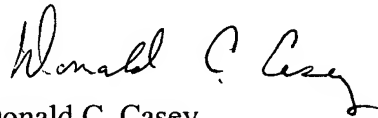
In contrast the Miser patent describes a cup seal used to seal "in cylinders or working barrels, the cup seals being carried by the moving element such as a pump rod or the like," column 1, lines 9-16. In column 2, second paragraph, the seal of the Miser invention is described as "having a first annular section formed from a generally non-flexible, non-resilient material." This is further described at column 3, lines 29-37 and it is indicated that if the cup seal of the Miser invention were made of an elastomer like material "throughout, the portion of the lip L adjacent to heel H would tend to expand radially outwardly to such a degree that a high friction area or wear area would be caused generally in a locus determined by the radially outward outer surface of heel H. This high friction area, particularly if the cup seal were in abrasive conditions would result in premature cup failure."

It is submitted then that Miser teaches away from the instant invention because it is not intended for the same purpose. The cup seal of the instant invention does not move within the pipe and therefore friction cannot establish a wear area as it would in the Miser case due to the fact that the seal is surrounding a movable element such as a pump rod. Beginning at column 4 line 56 extending to column 5 examples of the rigid material are provided. Then at the first full paragraph of column 5 examples of the material which may be used to form the second annular section are specified. It is of note that polyurethane is an acceptable material for constructing the flexible portion, but it is not identified in connection with materials that can be used for the rigid portion. The rigid portion, by definition, will not expand under pressure to seal against a pipe wall.

Accordingly then it is submitted that the Miser invention is not capable of performing the use intended in the instant case due to different materials of construction. Reconsideration and withdrawal of this rejection is requested.

Applicant considers this case in condition for allowance and an early notice thereof is requested.

Respectfully submitted,



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